DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the float **on** the under surface of the other side of the flap valve of claims 19 and 25 and the pressure release valve of claim 30 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

2. The drawings are objected to because it is unclear from the drawing that the bottom of the tubular body is open (please include hatching for all cutaway sections in the Figure). Item 24 is disclosed as directing the water around one side of the flap valve (page 3, lines 20-24). Per the drawing it appears that the inlet tube 14 is blocked by the guide 24; please clarify the drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities:

The specification should not refer to specific claims by number (page1, line 22). The claims are subject to cancellation and therefore the reference to the claims in the specification should be deleted. Further the claims that are being referred to have been cancelled in the application.

On page 4, line 4 "19b" should be --19a--.

Appropriate correction is required.

Claim Objections

5. Claim 17 is objected to because of the following informalities:

In line one "container," should be --container--. (delete comma after container)

Appropriate correction is required.

6. Claim 22 is objected to because of the following informalities:

In lines 2 to 3 "closed closed" should be --closed--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to what structure is being used to release the pressure above the flap valve.

9. Claim 30 recites the limitation "the hollow body" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 17, 18, 23, 24, and 30 are rejected as understood under 35 U.S.C. 102(b) as being anticipated by Rhodes (2,504,450).

Rhodes discloses a flow control device for dispensing liquid to a predetermined level in a container comprising a tubular body (48) having a closed upper end and an open lower end, an inlet (11) attached to or for attachment to a liquid supply, a flap valve (54) which is pivoted within the body below the inlet about an axis (53) extending transversely to the body and which, in the absence of external forces, will adopt an open condition allowing liquid to flow through the body, and a float (50) internally positioned within the body for pivoting the flap valve towards a closed condition as the liquid level in the container rises (col. 2, line 16 to col. 4, line 23).

Regarding claim 18, the inlet is arranged to direct liquid fed into the body towards the side of the flap valve in Figure 2 that is in shadow, which is towards one side of the pivot axis of the flap valve.

Regarding claim 23, the flap valve is weighted in order that it will adopt an open condition, in the absence of external forces. The float performs the functional language of weighting the flap valve.

Regarding claim 24, the axis of the flap valve is offset to one side of a plane bisecting the flap valve so as to divide the flap valve into two portions of unequal surface area. The plane that is being used to bisect the flap valve is not positioned in the center of the flap therefore the flap valve is divided into two unequal portions with the axis of the flap vale being offset to one side of the plane.

Regarding claim 30 as understood, the hollow body (14) has a pressure release valve (18) located above the flap valve when the latter is in the closed condition.

12. Claims 17-21, 23, 24-26, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Tharp (2,299,360).

Tharp discloses a flow control device for dispensing liquid to a predetermined level in a container comprising a tubular body (1 and 4) having a closed upper end (2) and an open lower end (exit from 4), an inlet (5) attached to or for attachment to a liquid supply, a flap valve (10) which is pivoted within the body below the inlet about an axis extending transversely to the body and which, in the absence of external forces, will adopt an open condition allowing liquid to flow through the body, and a float (14) internally positioned within the body for pivoting the flap valve towards a closed condition as the liquid level in the container rises (page 1, col. 1, line 34 to page 1, col. 2, line 52).

Regarding claim 18, the inlet is arranged to direct (13) liquid fed into the body towards one side of the pivot axis of the flap valve.

Regarding claims 19 and 25, the float acts on the under surface of the other side of the flap valve via rod 15, 18, and 11.

Regarding claim 20, the tubular body has a side discharge opening (19) for the liquid below the one side of the flap valve.

Regarding claim 21, the internal wall of the tubular body is provided with guide means (13) for encouraging liquid dispensed from the inlet to flow past the one side of the flap valve.

Regarding claim 23, the flap valve is weighted in order that it will adopt an open condition, in the absence of external forces. The float performs the functional language of weighting the flap valve.

Regarding claim 24, the axis of the flap valve is offset to one side of a plane bisecting the flap valve so as to divide the flap valve into two portions of unequal surface area. The plane that is being used to bisect the flap valve is not positioned in the center of the flap therefore the flap valve is divided into two unequal portions with the axis of the flap vale being offset to one side of the plane.

Regarding claim 26, connecting means (threading on the end of tube 4) for connecting the device to the container.

Regarding claim 28, the flap valve has an externally operable member (16, 15, 18, and 11) for pivoting the flap valve between closed and open conditions.

Regarding claim 29, the externally operable member also acts as a stop to ensure the flap valve closes in the correct position. The portion (11) of the external operable member will come into contact with the step portion of pipe 4 and stop further movement of the flap valve.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tharp in view of Langdon (2,390,108).

Tharp discloses all the features of the claimed invention except that the flap valve is provided with an annular seal for sealing against the internal wall of the body when the flap valve is in a closed position. Langdon discloses an annular seal (72c) on a flap valve (72) for sealing against the internal wall of the body (63a and 63c) when the flap valve is in a closed position (page 2, col. 1, lines 11-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an annular seal as disclosed by Langdon with the flap valve of Tharp, in order to create a better seal between the valve and valve seat.

15. Claims 26 and 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of Baudier (6,073,390).

Rhodes discloses all the features of the claimed invention except that the device comprises means for connecting the device to a container and further that the connecting means is a hook for hooking over the rim of the container. Baudier discloses the use of a hook (65) to anchor a float (51) controlled delivery device in place over the rim of a container (10)(col. 3, line 23 to col. 4, line 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a connecting means as disclosed by Baudier onto the inlet tube area of Rhodes, in order to ensure the maximum filling level of the container.

16. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of Knox (1,102,196).

Rhodes discloses all the features of the claimed invention except that the body is outwardly contoured in regions past which the flap valve, in use, passes as it approaches its closed position. Knox discloses the body outwardly contoured (5 and 6) in the regions past which the flap valve (4), in use, passes as it approaches its closed condition and a seating surface in which the valve seats (5a and 6a) after it passes the contoured region(page 1, lines 40-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize outwardly extending contours in the body in the region that the flap valve passes as it closes as disclosed by Knox in the body of Rhodes, in order to create a positive abutment for the sealing of the passageway.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rossbach-Rousset (575,172); Parker, Jr. (1,028,599); and Baumann (3,176,728) disclose float controlled filling devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRAIG M. SCHNEIDER whose telephone number is (571)272-3607. The examiner can normally be reached on M-F 8:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. M. S./
Examiner, Art Unit 3753
October 23, 2008

/Stephen M. Hepperle/
Primary Examiner, Art Unit 3753